Brandon Hoving, Evan Webb
National Weather Service Grand Rapids, MI

Overview

June 2013 was highlighted by highly variable rainfall amounts along with normal temperatures. Although Grand Rapids, Lansing, and Muskegon all recorded above normal rainfall, some locations across Central Lower Michigan recorded below normal rainfall. The disparity was apparent between coop sites like Hart and Scottville, which received less than 1.5 inches of rain compared to the Lansing Capital City Airport which received nearly 8.5 inches.

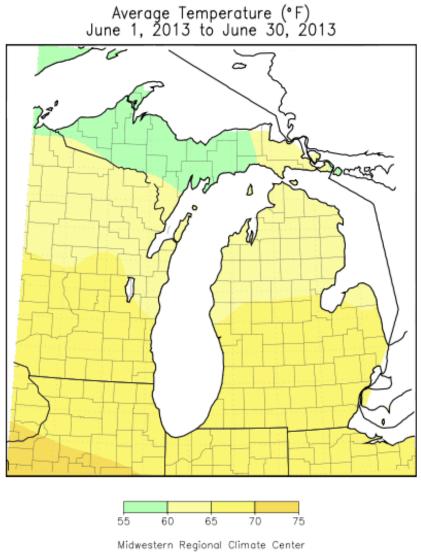
The month got off to a rather cool start during the first two weeks or so with highs mainly in the 60s and 70s. It was also a wet period at times with all three primary climate sites receiving a one inch or more rainfall event, and in the case of Lansing there were two events over one inch. A severe weather event late on June 12th and early on June 13th brought damage to trees and produced a few large hail reports as well as flash flooding to Southwest Lower Michigan. Strong storms also brought localized damage to the Vicksburg area on the 17th with a 68 mph measured gust along with some tree and road sign damage.

Periods of heavy rain also struck during the second half of the month with numerous instances of 1 to 3 inch rainfall totals across Southwest Michigan. Reports of flooding occurred in the Kalamazoo area on the 25th with 2 to 4 inches of rain falling in a short time. Additional significant rainfall struck the Lansing area on the 28th with a band of 1 to 3 inches that produced localized flooding and temporary barricading of roads.

By the end of the month...the Lansing area had reached the 4th wettest June on record and also the 9th wettest month on record. With the midway point in the year fast approaching, all three climate sites were easily on record pace for the wettest year all-time. This is especially due in part to a wet spring for much of West Michigan.

Table 1. Reported temperature and precipitation amounts for June 2013 at primary climate stations in Southwest Lower Michigan.

Location		Average Temperature (° F)	Precipitation (inches)
Grand Rapids	Observed	68.4°	4.52 in
	Normal	68.4°	3.77 in
	Above/Below Normal	+ 0.0°	+ 0.75 in
Lansing	Observed	67.4°	8.40 in
	Normal	67.6°	3.45 in
	Above/Below Normal	- 0.2°	+ 4.95 in
Muskegon	Observed	66.4°	4.33 in
	Normal	66.3°	2.55 in
	Above/Below Normal	+ 0.1°	+ 1.78 in



Midwestern Regional Climate Center

MRCC Applied Climate System

Generated at: 7/1/2013 1:35:09 PM CDT

Figure 1. Average temperature (°F) for June 2013.

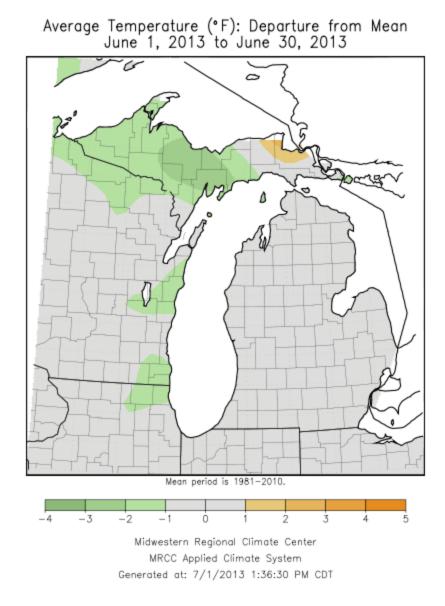


Figure 2. Average temperature departure (°F) for June 2013.

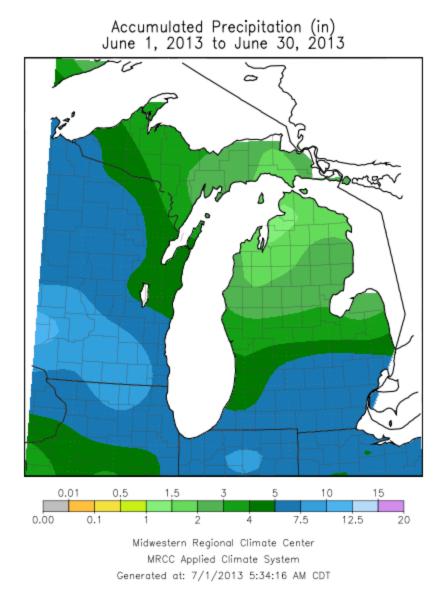


Figure 3. Total precipitation (in inches) for June 2013.

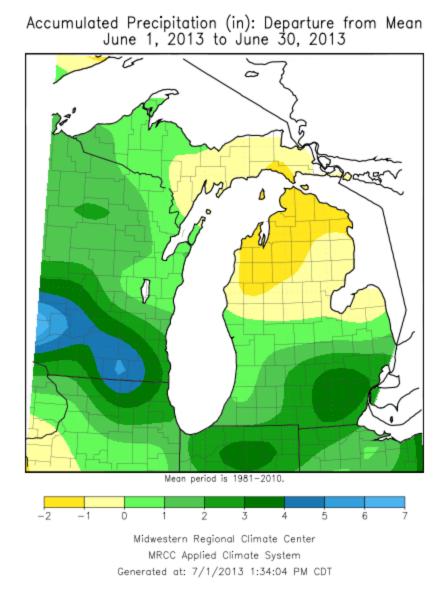


Figure 4. Average precipitation departure (in inches) for June 2013.